



# **FIGURATE Surge Protection Valve**

### DATA SHEET

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# PRODUCT OVERVIEW

Flowsafe AWSPV Air & Water Surge Protection Valve

The **flow**safe AWSPV valve offers air, surge and vacuum protection as a custom built solution for installation at the top of a riser in a building to reduce the potential for hydraulic shock.

The unique AWSPV valve incorporates as standard, three design features to automatically protect building risers under all operating conditions, from the destructive surge and water hammer phenomena.

These features are independent of any mechanical devices ensuring reaction in a very low milli second time span.

The AWSPV valve utilises the large orifice to admit air in the riser thus preventing vacuum occurring when the booster set is down (powered off).

- Automatic Surge Protection
- 1" BSP Connection
- Dampens effect of Water-Hammer at pump start-up
- Provides Vacuum Protection when the pump stops and the riser drains
- PN10 Rated
- Versions rated at higher pressures up to PN40 available on request.

#### **Effective Air Release**

During filling, air is forced through an "Anti-Surge" orifice resulting in the deceleration of the approaching water column due to the resistance of rising air pressure in the valve. This dampens potential pressure transients when the air valve closes. The AWSPV valve design, ensures effective de-aeration under all pipeline flow and operating conditions, via either one of three discharge orifices.

#### **TYPICAL ARRANGEMENT**

The AWSPV valve must be installed at the top of each riser to ensure adequate water-hammer protection.

An isolating valve should be installed to facilitate maintenance.

#### **IMPORTANT NOTE**

To ensure proper operation the system must be thoroughly flushed prior to the installation of the AWSPV valve.



\*\* The design, size and use of every cold water riser/distribution laterals is different for all buildings, hence to size a water/air surge protection valve correctly, the system should be evaluated to determine the maximum flow rate of air entering the system under vacuum conditions. In reality this is virtually impossible to estimate, so the figure stated is based on a maximum vacuum not exceeding 0.1 bar (riser draw down flow rate of approximately 55m<sup>3</sup>/hr.

System fill - We strongly recommend that all booster pump set control systems utilise a "system fill" feature to assist with controlled slow filling of a system after a power failure or if the system pressure drops below a pre-determined threshold. We can offer a retro fit solution for systems without this feature.

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# DIMENSIONAL DRAWINGS & SCHEMATICS



Size mm / in.	Pressure Rating	А	В	с	D	E	Weight
25 / 1"	PN10*	337mm	317mm	95mm	1" BSPF	1" BSPF	4.6 kg

Max. Riser Pipe Diameter	WRAS No.	Min. pressure	Max. temperature	Min. temperature
200mm **	1507093	0.3 Bar	70°C/158°F	4°C/40°F





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We place great emphasis on providing technical back up to support our Service Engineers in resolving some difficult operational and technical issues. We pride ourselves on completing a project on time, within budget and never leaving a problem unresolved, or a customer waiting. This quality of service has made us the first choice for our customers.

#### FOR FURTHER INFORMATION OR ASSISTANCE

# contact us

Flowtech Water Solutions are experts in water services and water booster sets. We have continuously supplied a wide range of standard and custom products since being founded in 1996.

#### **MANUFACTURE & SUPPLY**

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